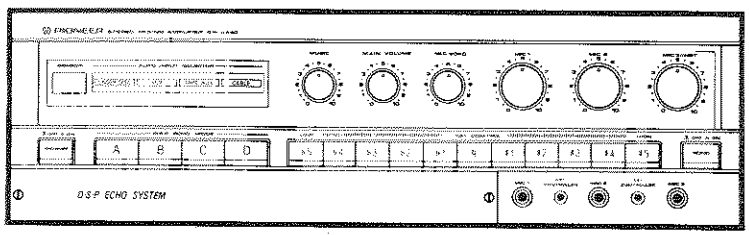
PIONEER®
The Art of Entertainment

Operating Instructions
Mode d'emploi
Bedienungsanleitung
Istruzioni per l'uso
Manual de instrucciones

SA-V240

STEREO MIXING AMPLIFIER
AMPLIFICATEUR DE MIXAGE STEREO
STEREO-MISCHVERSTÄRKER
AMPLIFICATORE MIXER STEREO
AMPLIFICADOR DE MEZCLA ESTÉREO

English
Français
Deutsch
Italiano
Español



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING:

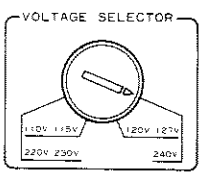
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

WARNING!	ADVARSEL!	VAROITUS!
Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.	Lithiumbatteri. Eksplosionsfare. Udskiftning må kun foretages af en sagkyndig, og som beskrevet i servicemanualen.	Litiumparistot. Räjähdysvaara. Vaihdon saa suorittaa ainoastaan asiantunteva huoltoteknikko noudattamalla huolto-ohjeessa annettuja ohjeita.

LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S. and Canadian, models are not provided with this switch.
Mains voltages in Saudi Arabia are 127V and 220V only.
Never use this model with a 110V – 115V setting in Saudi Arabia.
Before your model is shipped from the factory, this switch is set to the power requirements of the destination; nevertheless, you should check that it is set properly before plugging the power cord into the wall outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selector and adjust so that the tip of the arrow points to the voltage value of your area.



IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last (make sure that the power switch is off.)

FOR USE IN THE UNITED KINGDOM

WARNING: This plug must only be connected to electronic apparatus equipped with suitable sockets. If not, cut off the plug and fit an appropriate type in accordance with the instructions below.
The cut-off plug must be disposed of as an electrical shock hazard could exist if connected to a socket outlet.

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS – All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS – The operating instructions should be retained for future reference.

HEED WARNING – All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS – All operating and use instructions should be followed.

WATER AND MOISTURE – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION – The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING – The appliance should not be mounted to a wall or ceiling.

VENTILATION – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION – If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING – The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES – An outdoor antenna should be located away from power lines.

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE – The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the appliance.
- The appliance has been exposed to rain.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- The appliance has been dropped or the enclosure damaged.

SERVICING – The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GROUNDING – If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A

CART – An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

NEC NATIONAL ELECTRIC CODE

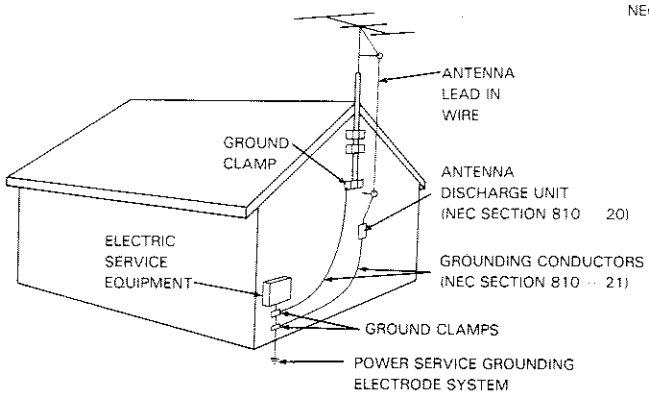


FIG. A

"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

CONTENTS

BEFORE CONNECTION 3
INSERTING BATTERIES IN THE REMOTE CONTROL UNIT 3
CONNECTIONS 4
PANEL FACILITIES 6
OPERATION 11
ENJOY THE ECHO EFFECT 11
TROUBLESHOOTING 12
SPECIFICATIONS 12

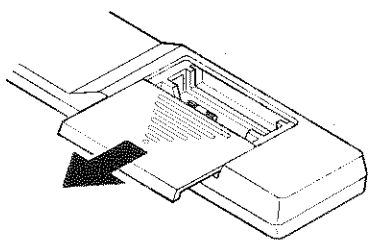
BEFORE CONNECTION

Connection Precautions

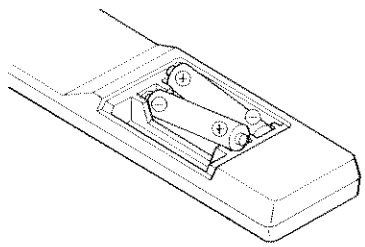
- Do not turn the stereo mixing amplifier or the stereo components ON before all connections are completed.
- The IN/OUT terminals of the stereo mixing amplifier are assigned as "L" for the left channel and "R" for the right channel. Be sure to connect to the correct channel.
- Insert the connection cables correctly. Improper connection may result in no sound from the speakers or cause background noise.

INSERTING BATTERIES IN THE REMOTE CONTROL UNIT

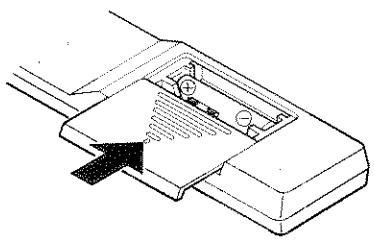
1



2



3



1. **Open the cover of the battery case on the rear side of the remote control unit.**

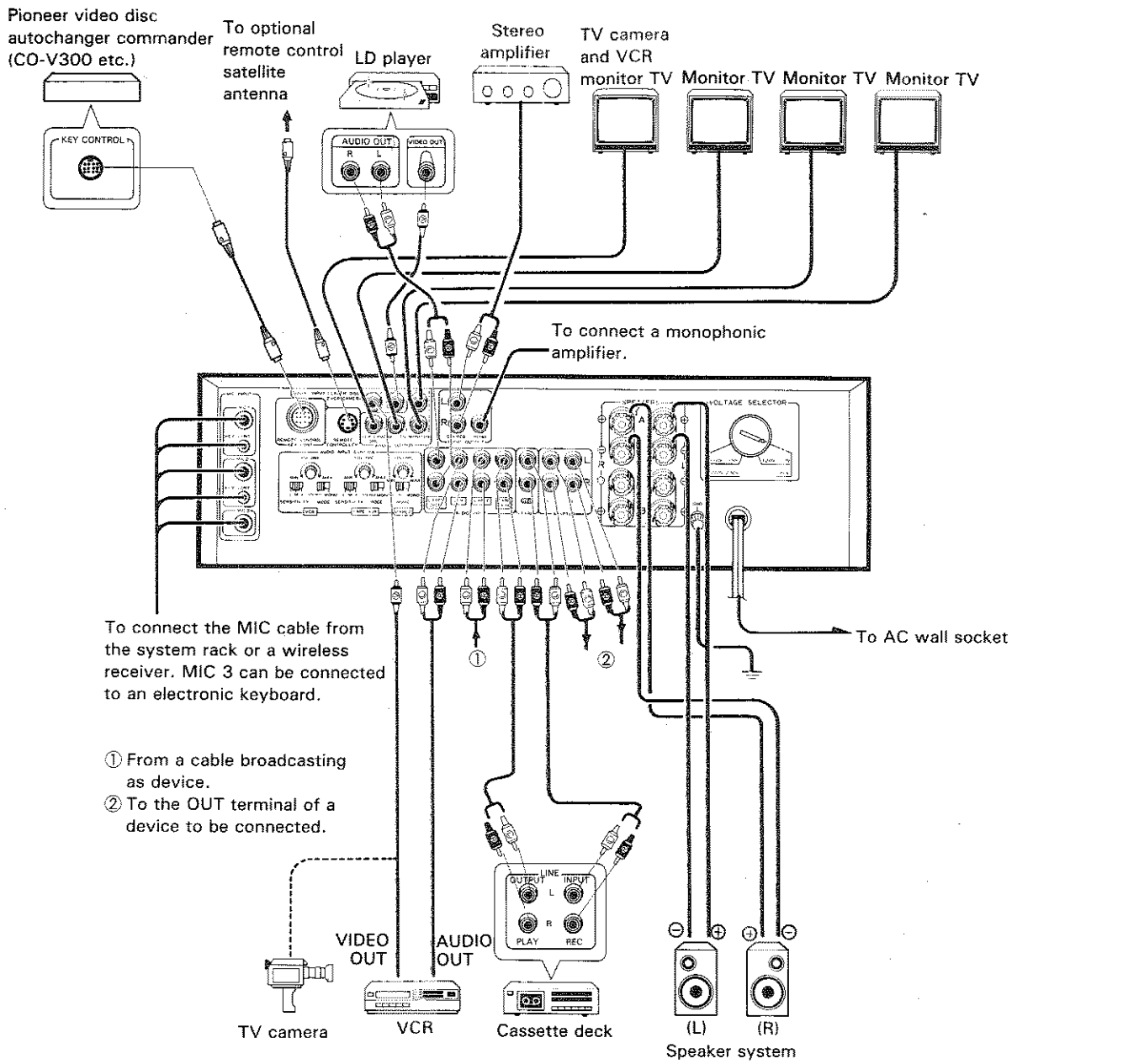
2. **Insert the batteries.**

3. **Close the cover.**

Improper use of batteries may cause leakage or explosion. To avoid such danger, take the following precautions:

- Be sure to insert the batteries with correct polarity. Otherwise, the remote control unit does not operate.
- Do not mix new and used batteries.
- Some batteries have different voltage even though the size is the same. Use the same type of batteries.
- Normally, service life of the batteries is approximately six months. Make sure to remove the batteries if you do not use the remote control unit for a long period.
- If leakage occurs, clean the case thoroughly before loading new batteries.

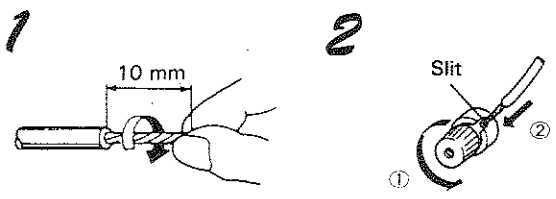
CONNECTIONS



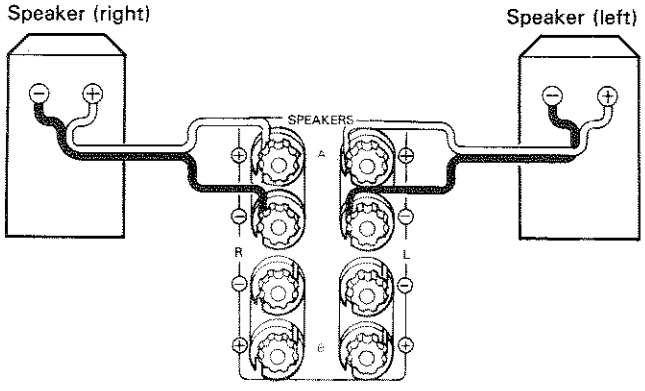
Be sure to switch the power of the stereo mixing amplifier and the stereo component ON only after all connections of stereo system are completed.

Connection of Speaker Cord

Strip off the vinyl coating and put the wire ends together.



1. Loosen the screw and insert the wires into the hole.
2. Tighten the screw and fasten the wires.



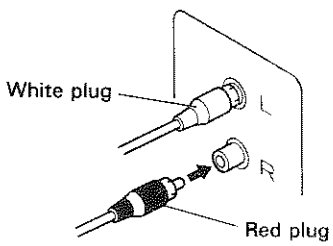
NOTE:
Be careful to avoid wires from sticking out from the terminal and touching other wires, as this might cause malfunction.

Impedance of Speaker System

Speaker systems with a nominal impedance of 4 to 16 Ω can be used when systems A and B are used separately.Use nominal impedance of 8 to 32 Ω when playing both systems simultaneously.

Connection of Input and Output Cords

- Connect white plug to "L" side and red plug to "R" side. Make sure to insert them securely.

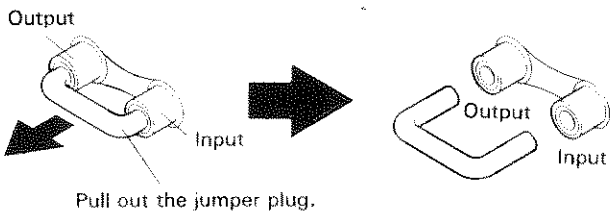


- Insert the pin plug of the connecting cords securely. Incomplete plugging may result in noise or insufficient sound.

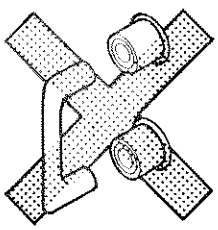
To use ADAPTOR jacks:

Remove the jumper plug when connecting a graphic equalizer or sound processor to the ADAPTOR IN/OUT jacks.

- Store the jumper plug in a safe place. Do not install it onto other jacks.
- Be sure to install the jumper plug when you are not using the ADAPTOR jacks.



- Do not install the jumper plug vertically. Incorrect installation may cause a malfunction.



NOTE:
When using only the speakers with a separate power amplifier connected to the SA-V240:
Make sure to set the MAIN VOLUME control of the SA-V240 to "0."

When using speakers with both the SA-V240 and a separate power amplifier connected to the SA-V240:
Adjust the sound volume of the speaker connected to the SA-V240 using the MAIN VOLUME control of the SA-V240.

Adjust the sound volume of the other speaker connected to the separate power amplifier using the VOLUME control of the power amplifier.

INFORMATION TO USER [FOR U.S. MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

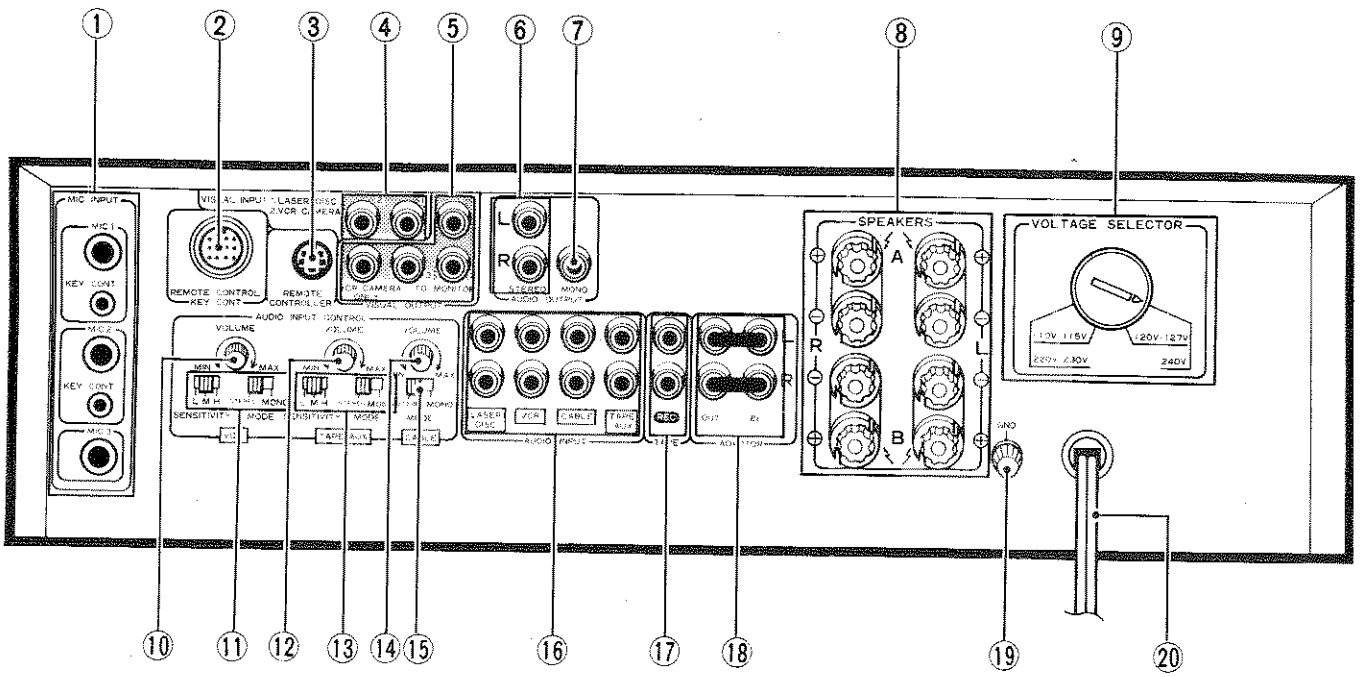
- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems"
This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

The above instructions apply only to units which will be operated in the United States.

PANEL FACILITIES

REAR PANEL



① MIC INPUT jacks 1, 2 and 3

Connect the MIC cable(s) of the optional video rack. The MIC INPUT jacks are also used for connection to the optional wireless mic receiver.

When using microphones with key control remote switch connected to MIC 1 and 2, connect the control cords to the KEY CONT jacks.

If a microphone is connected to the MIC jack on the front panel, front input has priority.

NOTE

- *Position of the key controller may change by connecting/disconnecting of the remote plug. In such a case, set it again to the desired position.*
- *For the key control function, both front and rear inputs are effective.*

② REMOTE CONTROL KEY CONT jack

Connect to the remote control terminal of the Pioneer commander capable of controlling the key controller. (Use the controlling cord for key controller supplied with the commander.)

By using the wireless remote controller supplied with the commander, operation of the SA-V240s key controller can be remote-controlled.

③ REMOTE CONTROLLER input jacks

Connect the optional remote control satellite. Installing the satellite on the ceiling or wall allows the remote control unit to function properly even if obstacles exist between the amplifier and the remote control unit. See the instruction manual of the remote control satellite for details of connection.

④ VISUAL INPUT jacks

■ 1 LASERDISC

Connect to the VIDEO OUT jack of the LD player.

■ 2 VCR/CAMERA

Connect to the VIDEO OUTPUT jack of the VCR or TV camera.

⑤ VISUAL OUTPUT jacks

■ 1-3

Jacks for connection to the VIDEO INPUT jacks of TV monitors (maximum three monitors).

■ VCR/CAMERA ONLY

Signals input to the "VCR/CAMERA" VISUAL INPUT jack of the SA-V240 will always be output. By connecting to a TV monitor, you can monitor a VCR or video camera.

⑥ AUDIO OUTPUT jacks (STEREO)

These jacks are used to output the L and R audio signals to the audio input terminals (LASERDISC, VCR, CABLE, TAPE/AUX) of this unit. (excluding MAIN VOLUME and BALANCE controls)

⑦ AUDIO OUTPUT jacks (MONO)

The L and R audio signals input to the audio input jacks (LASERDISC, VCR, CABLE, TAPE/AUX) always appear as L + R monaural.

⑧ SPEAKERS terminals

Two speaker systems (A and B) can be connected. For details, refer to "CONNECTIONS" on page 4.

- Always connect the plus (+) and minus (−) wires of the speakers to the speaker terminals of the same polarity. A polarity error can cause unnatural sound.

⑨ VOLTAGE SELECTOR switch

⑩ VCR VOLUME control

Controls the volume of the VCR input terminals sound.
This control is normally centered but should be adjusted in accordance with the volume of the LASERDISC.

⑪ VCR SOURCE SELECTOR SENSITIVITY switch

Switch it for proper operation of the AUTO SOURCE SELECTOR function of the SA-V240. For the AUTO SOURCE SELECTOR function, see page 11.

M: Normal position

L: (When no LASERDISC signal is input.)
If "TAPE/AUX" or "CABLE" terminal is automatically selected even though VCR is being played, set to this position "L" to select VCR.

H: (When no LASERDISC signal is input.)
If "TAPE/AUX" or "CABLE" is not selected even though VCR finishes its playback, set to this position "H" to select "TAPE/AUX" or "CABLE".

VCR MODE switch

This switch is used to select the VCR audio modes (MONO/STEREO).
Connect a VCR with monophonic audio output either to "L" or "R" AUDIO INPUT jack an set this switch to "MONO".

⑫ TAPE/AUX VOLUME control

Controls the input sound level of devices connected to the TAPE/AUX input terminals. This control is normally centered but should be adjusted for LASERDISC.

⑬ TAPE/AUX SOURCE SELECTOR SENSITIVITY switch

Switch it for proper operation of the AUTO SOURCE SELECTOR function of the SA-V240.

M: Normal position.

L: (When neither LASERDISC nor VCR signal is input.)
If "CABLE" is automatically selected even though "TAPE/AUX" signal is being played, set to this position "L" to select "TAPE/AUX."

H: (When neither LASERDISC nor VCR signal is input.)
If AUTO INPUT selector remains at "TAPE/AUX" even though TAPE/AUX finishes its playback, set to this position "H" to select "CABLE."

TAPE/AUX MODE switch

This switch is used to select audio modes (MONO/STEREO) of components connected to the TAPE/AUX input terminals.
Connect a component with monophonic audio output either to "L" or "R" AUDIO INPUT jack and set this switch to "MONO".

⑭ CABLE VOLUME control

Controls the volume of the CABLE input terminals sound.
Thus control is normally centered but should be adjusted in accordance with the volume of the LASERDISC.

⑮ CABLE MODE switch

Changes the audio mode (MONO/STEREO) of cable broadcasts.
For mono cable broadcasts, connect to either the "L" or "R" channel and set the CABLE MODE switch to MONO.

⑯ AUDIO INPUT jacks

■ LASERDISC
Connect to the AUDIO jacks of a LD player.
■ VCR
Connect to the AUDIO OUT jacks of a VCR.
■ CABLE
For input of monophonic audio signals from cable receivers etc. When both terminals are connected select 1 or 2 using the sending device.
■ TAPE/AUX
Can be connected to the PLAY (OUTPUT) jacks of a cassette deck or to the OUTPUT jacks of other audio components.

⑰ TAPE REC jacks

Connect to the REC (INPUT) jacks of a cassette deck. Mic mixing recording will be possible, because signals processed with microphone mixing are output.
Sound of TAPE/AUX or CABLE will not be output when the TAPE REC button is OFF.

⑱ ADAPTOR IN/OUT jacks

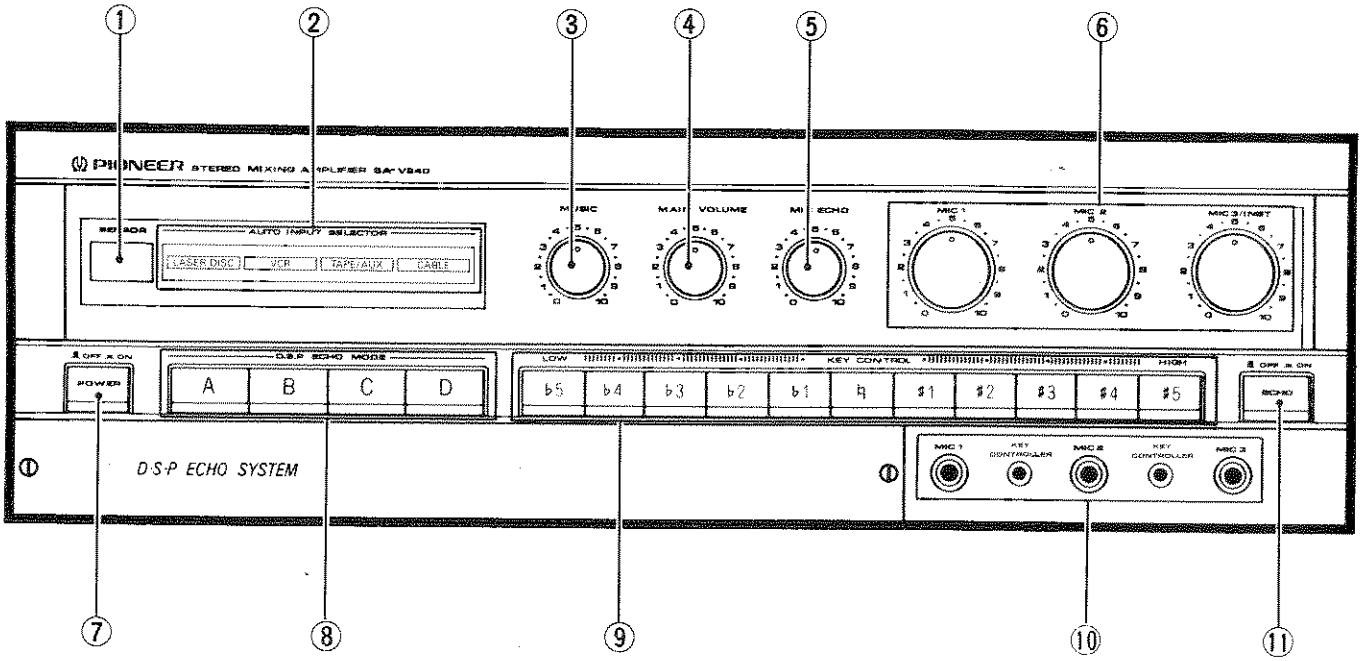
Used to connect a graphic equalizer or a sound processor. The ADAPTOR IN/OUT jacks have a jumper plug. Install the jumper plugs when you do not use these jacks. Otherwise, there will be no sound output.

⑲ GND (Ground) terminal

Always ground this unit to prevent electrical shock and to avoid generating interference or noise in other equipment.

⑳ Power cord

FRONT PANEL



① REMOTE SENSOR

② AUTO INPUT SELECTOR indicators

This unit automatically select the input source signals with priority in the order of LASER DISC, VCR, TAPE/AUX, and CABLE.
These indicators display the output source accordingly.

③ MUSIC control

Controls the volume of equipments connected to the LASER-DISC, VCR, TAPE/AUX and CABLE jacks on the rear panel. Normally, keep the MAIN VOLUME control near the 5 – 7 position and use the MUSIC control to adjust the volume of the music source.

④ MAIN VOLUME control

Controls the volume of the sound from the speakers.

⑤ MIC ECHO control

Controls the echo levels for microphones 1, 2 and 3 simultaneously.

NOTE:
When using a microphone, the original sound itself is processed as well as any effect sound such as an echo, which is added to the original sound.
Therefore, the echo mode will remain activated even when the MIC ECHO control is set to minimum.
When using an effect sound, set the MIC ECHO control to "3" ~ "4."

⑥ MIC volume controls (MIC 1,2 and 3)

To adjust the respective microphones volume level against the music source.
Normally, keep the MAIN VOLUME control near the 5 –7 position and use the MIC controls to adjust the volumes.
MIC 1 and 2 have a function which automatically reduces the sound volume to a proper level when distortion is caused by howling or an excessively loud voice.

⑦ POWER switch (▬ OFF, ▬ ON)

Pressing this switch turns ON the power.
Pressing this switch again turns OFF the power.

⑧ D.S.P. ECHO MODE buttons

Selects desired echo effect from A, B, C or D.

⑨ KEY CONTROL buttons/indicators

Press to change the pitch of the music source.

■ ♮

Changes to the standard pitch.

■ ♯1 – ♯5

A maximum raise of five tones above the setting of the standard key is possible in semitone-steps.

■ ♭1 – ♭5

A maximum decrease of five tones below the setting of the standard key is possible in semitone-steps.

NOTE:
No key change is possible when "CABLE" has been selected by the input selector.

⑩ MIC and KEY CONTROLLER jacks

Three microphones can be connected simultaneously.
When using a microphone with key control switch, connect it to MIC 1 or MIC 2 jack. And be sure to connect the control cable to the KEY CONTROLLER jack.

NOTES:

KEY CONTROLLER jack

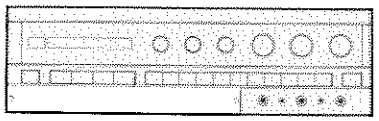
The set position of the key control might change when the control plug is connected to or removed from the KEY CONTROLLER jack. In such a case, reset to the desired position.

MIC jack

When a microphone is also connected to a MIC INPUT jack on the rear panel, the microphone connected to the front panel has priority. Note that there is no priority order with the key control function.

⑪ MIC 3 ECHO switch (▬ OFF, ▬ ON)

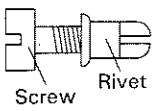
This switch controls only the echo for the microphone 3 input.



Open the front panel door for access.

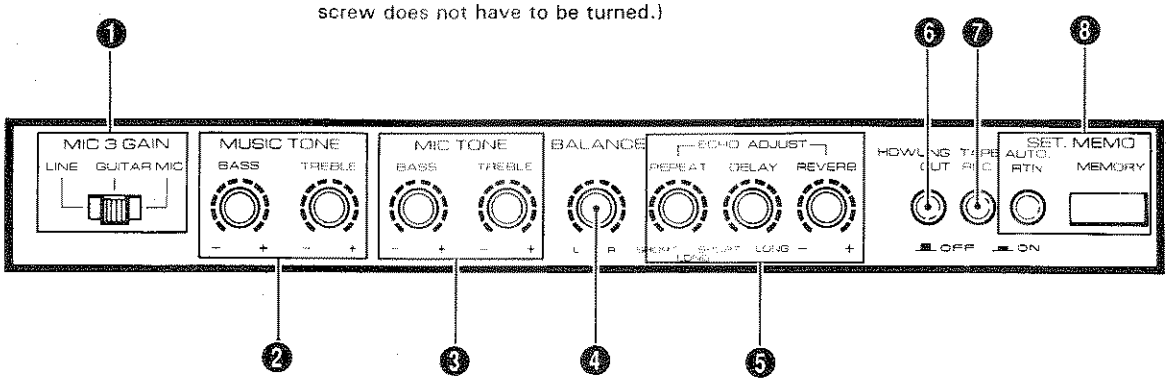
How to open the door:

1. Loosen the screw with a minus screwdriver.
2. Turn the screw until the head comes off. Hold the screw head with pliers and remove the screw and the rivet.
   If only the screw is removed, press the screw in and perform step 2 again.
3. Push the lower portion of the door and open it.



How to close the door:

Close the door. Insert the screw and the rivet into the hole. (The screw does not have to be turned.)



❶ MIC 3 GAIN switch

Choose the mode according to the device connected to the MIC INPUT jack 3.
(Example)
To connect an electronic keyboard ..... LINE
To connect an electric guitar ..... GUITAR
To connect a microphone ..... MIC

NOTE:
Do not set the switch to MIC when using an electronic keyboard or an electric guitar.

❷ MUSIC TONE control (bass/treble)

- Adjusts the tone (bass/treble) of the device connected to the VIDEO DISC, VIDEO, CABLE or TAPE/AUX jack on the rear panel.

❸ MIC TONE control (bass/treble)

Can simultaneously adjust the tone of MIC 1, 2 and 3. Adjusts bass and treble.

❹ BALANCE control

Adjusts the sound balance of both speakers.

❺ ECHO ADJUST control

Varies the echo characteristics of MIC 1, 2 and 3.
REPEAT:
Adjusts the timing of the echo (number of repetitions).
DELAY:
Adjusts the repetition interval of the echo.
REVERB:
Changes the echo volume of the vocal.

❻ HOWLING CUT button

Set this button to ON ▬ to prevent howling.
Depending on the conditions and acoustics of the room, an adequate effect may not be obtained even though the HOWLING CUT button is ON.

❼ TAPE REC button

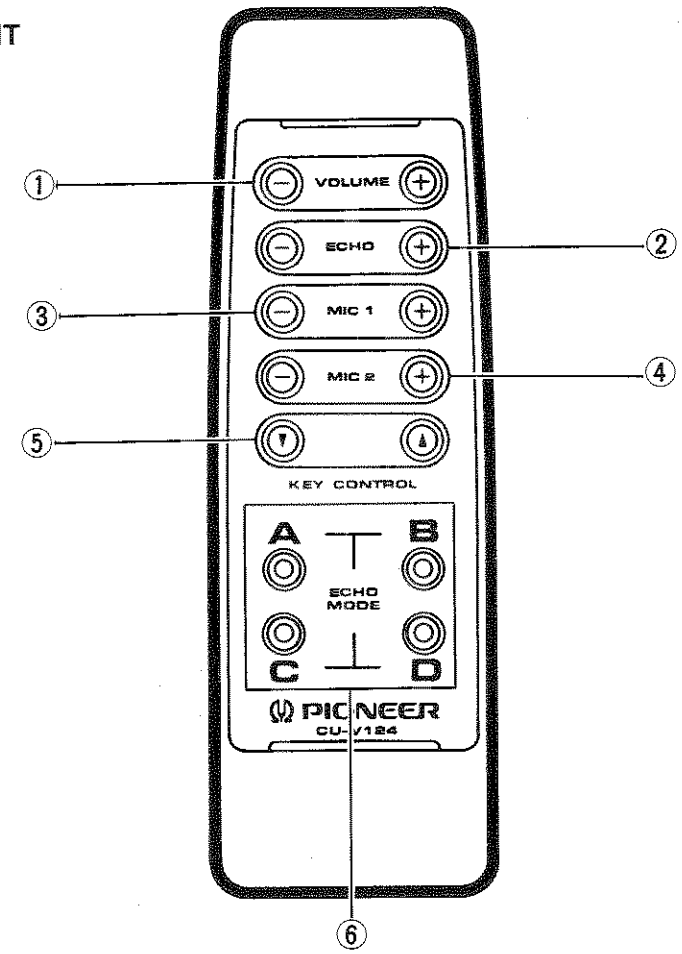
Setting this button to ON allows you to record cable broadcasts. Set the button to OFF when you are not recording cable broadcasting programs.

NOTE:
No tape sound will be output when this button is ON.

❽ SET MEMO button

MEMORY button: Saves data for a desired sound volume for MAIN, MIC, D.S.P. ECHO MODE and ECHO to memory.
To store data, hold the MEMORY button down for several seconds.
The key control button indicators blink in sequence until the data are stored.
AUTO RTN button: Setting this button to ON allows the system to return to a set sound volume whenever a tune is finished and the MAIN and/or MIC volume has been adjusted.
When the AUTO RTN button is OFF, the system will not return to the state specified in the setting memory. However, the system returns to the specified state regardless of ON or OFF of this button when the power is turned ON.

REMOTE CONTROL UNIT



① VOLUME (−, +) button
Adjusts the sound volume of the entire system.

② ECHO (−, +) button
Can simultaneously adjust the echo volume for MICs 1, 2 and 3.

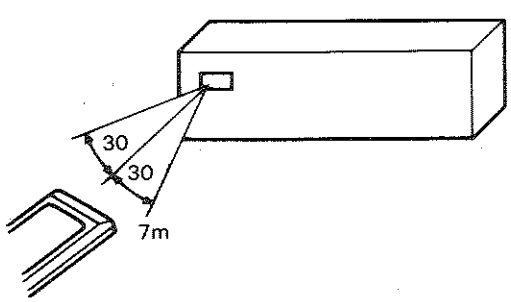
③ MIC 1 volume adjustment (−, +) button
Adjusts the sound volume of MIC 1.

④ MIC 2 volume adjustment (−, +) button
Adjusts the sound volume of MIC 2.

⑤ KEY CONTROL (▼, ▲) button
▼ : Changes to a lower key.
▲ : Changes to a higher key.

⑥ D.S.P. ECHO MODE button
Allows choice of your favorite echo effect from A, B, C or D.

The supplied remote control unit allows you to control the amplifier from a remote location. Point the remote control unit at the amplifier's sensor. The remote control unit can be used within a distance of 7 m and at up to an angle of 30 degrees.



- The remote control unit might not operate properly when an obstacle exists between the sensor and the remote control unit. Also, the remote control unit might not work if it is pointed from an improper angle.
- Remote control operation might not work if the remote control sensor is directly hit by strong fluorescent light. In such a case, place the fluorescent lamp away from the amplifier.
- If the remote control unit is used near a device emitting infrared rays, or another remote control unit using infrared rays is operated nearby, improper operation might occur. Also, a device using infrared rays might operate improperly if the remote control unit is used near the device.
- Replace the batteries if the available operation range of the remote control unit becomes very small.
- To prevent leakage, remove the batteries if you do not use the remote control unit for a long period (more than 1 month).

OPERATION

The numbers following the names of switches and controls in this section correspond to the numbers shown in the "FRONT PANEL".

1. Turn the power ON to the SA-V240 and other components.

• When using an LD player, turn on the TV monitor.

2. Connect the microphone(s) to the MIC jack(s) ⑩.

3. Set the MAIN VOLUME control ④ as desired (e.g. set to 5 – 7).

4. Start playback. Adjust the volume level with the MUSIC control ③ and speaker balance with the BALANCE control ❹.

5. Speak or sing into the microphone and adjust the volume level with the MIC volume control ⑥.

6. Adjust the sound with the MUSIC TONE controls ❷, ECHO adjusting controls ❺, MIC TONE controls ❸, and MIC ECHO control ⑤ as desired.

7. Select the desired key with the KEY CONTROL buttons ⑨.

AUTO SOURCE SELECTOR

The SA-V240 automatically selects and outputs all input signals according to the following priority.
① LASER DISC
② VCR
③ TAPE/AUX
④ CABLE
The input sensitivity of VCR and TAPE/AUX can be changed by the SOURCE SELECTOR SENSITIVITY switch on the rear panel.

Automatic output switching of TV monitor

When the LD player is in stop mode, VIDEO signals from VISUAL INPUT jack 2 (VCR/CAMERA) will be output from the VISUAL OUTPUT jacks 1,2 and 3 to the monitor.

Fade-in function for cable

When the SA-V240 is switched from LASERDISC, VCR or TAPE/AUX mode to CABLE mode, the fade-in circuit is activated and the volume level gradually increases to the level that has been set by the MAIN VOLUME control after approx. 2 to 8 seconds.

ENJOY THE ECHO EFFECT

D.S.P. ECHO MODE

The D.S.P. ECHO MODE consists of the following four types:
A: Slightly reduced reverb. Emphasizes echo and bass. Suitable for ballads.

B: Emphasizes rhythmic feeling in both echo and reverb. An effect like singing in a concert hall can be obtained by adding the delay effect. Accents powerful high-pitched tones. Suitable for rock music.

C: The chorus effect increases your voice depth. Suitable for pop music. Singing has never been so much fun.

D: Deep vocal effect is obtained by adding reverb to a conventional echo effect.

ECHO

• Adjustment of the Microphone Echo Volume

An echo effect makes you feel as if you are singing well, just like when you are humming in the bathroom. With the amplifier, the echo can be simultaneously applied to MIC 1, 2 and 3. The echo volume can be adjusted with the MIC ECHO control. MIC 3 can be turned on/off using the switch.

• Echo Adjustment

Echo can be adjusted by the following:
REPEAT:
Changes the echo cycle to enhance the echo effect. Adjust to a shorter echo cycle for tunes with a quick tempo. Adjust to a longer echo cycle for tunes with a slow tempo.

DELAY:
Changes the echo intervals to enhance the echo effect.
Adjust the intervals according to the tempo of the tune.

REVERB:
Changes the echo volume of your voice.
Adjust the volume according to the voice quality.

Adjust to the desired echo effect by using the REPEAT, DELAY and REVERB controls.

• To Maximize the Echo Effect for Karaoke (Sing-Along):

Set the sound volume of the music slightly lower than the vocal. This will improve the mixing balance and maximize the echo effect.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
No sound from both or either speaker.	• Power cord is unplugged. • BALANCE control is set to max. right or left position. • Either plug of the speaker cord is disconnected.	• Connect the power cord. • Set the control to center position. • Connect the plug securely.
Microphone mixing does not operate.	• Microphone is incompletely plugged. • MIC volume control is set to minimum.	• Plug the microphone completely into the terminal. • Adjust with the MIC volume control.
Remote control unit does not work.	• No battery is loaded in the remote control unit, or remaining service life is low. • A fluorescent lamp is near the remote control sensor. • The distance to the amplifier is too far, or the remote control unit is pointed at an improper angle. • An obstacle exists between the remote control unit and the amplifier.	• Insert new batteries. • Place the fluorescent lamp away from the amplifier. • Use the remote control unit within a range of approximately 7 m and at an angle of approximately 30 degrees or less. • Use the remote control unit from a different angle, or remove the obstacle.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Continuous power output
30 Hz ~ 20 kHz, T.H.D. 3 %, 8Ω ..... 100 W + 100 W
Dynamic power (2Ω) ..... 175 W
Total Harmonic Distortion
(AUX IN, 1 kHz, 60 W, 8Ω) ..... 0.1 %
Input Terminal (Sensitivity/Impedance)
Audio
MIC ..... 2.5 mV/25 kΩ
VCR, TAPE/AUX ..... 75 mV/50 kΩ
LASERDISC, CABLE ..... 150 mV/50 kΩ
Video
LASERDISC, VCR/CAMERA ..... 1 Vp-p/75 Ω
Output Terminal (Output level/Output impedance)
Audio
MONITOR L+R, L, R ..... 1 V/2.2 kΩ
TAPE REC L, R ..... 1 V/2.2 kΩ
Video
MONITOR, VCR/CAMERA ..... 1 Vp-p/75 Ω
Speakers Terminal
A or B ..... 4 to 16 Ω
A and B ..... 8 to 32 Ω
Frequency Response
MIC ..... 100 Hz to 20 kHz $^{+0}_{-3}$ dB
LASERDISC, CABLE, VCR, TAPE/AUX ··· 10 Hz to 60 kHz $^{+0}_{-3}$ dB
Tone Control (Music/Mic)
BASS ..... $^{+14}_{-12}$ dB/$^{+14}_{-13}$ dB (100 Hz)
TREBLE ..... $^{+9}_{-12}$ dB/$^{+3}_{-12}$ dB (10 kHz)
Echo delay time/decay time ····· 150 to 300 msec/0 ~ 4 sec
Key Control Range ····· ± 2.5 musical intervals (11 positions)
Signal to Noise Ratio (DIN, continuous power/50 mW)
MIC ..... 54 dB/54 dB
LASERDISC, CABLE, VCR, TAPE/AUX ..... 57 dB/60 dB
Power supply, Others
Power requirements .. AC 110 — 115/120 — 127/220 — 230/240 V (switchable), 50/60 Hz
Power consumptions ..... 560 W
Dimensions ..... 420 (W) x 130 (H) x 410 (D) mm
Weight (Without package) ..... 13.0 kg
Accessories
Audio cords 1
Operating instructions 1
Remote control unit 1
Batteries 2

Specifications and design subject to possible modification without notice due to improvement.

Published by Pioneer Electronic Corporation.
Copyright © 1991 Pioneer Electronic Corporation.
All rights reserved.